UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 03/31/2009

NOTICE OF ALLOWANCE AND FEE(S) DUE

5514 7590 03/31/2009 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA

NEW YORK, NY 10112

EXAMINER

RODRIGUEZ, LENNIN R

ART UNIT PAPER NUMBER

2005

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,473	02/10/2004	Norivoshi Kurotsu	00862.023450.	9148

TITLE OF INVENTION: PRINT CONTROL PROGRAM AND INFORMATION PROCESSING APPARATUS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	06/30/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including d below or directed off tions	or transmitting t ng the Patent, ad nerwise in Block	the ISSU vance of 1, by (a	JE FEE and PUBLICATI rders and notification of n a) specifying a new corres	ON FEE (if requinaintenance fees who pondence address;	red). I ill be and/or	Blocks 1 through 5 s mailed to the current (b) indicating a sepa	nould be o correspond rate "FEE	ompleted where lence address as ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Fee(Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
FITZPATRICK 30 ROCKEFELI NEW YORK, N			O'	Lhe	Cert	ificate	of Mailing or Trans s) Transmittal is being ficient postage for firs ISSUE FEE address I) 273-2885, on the d	denosited	with the United il in an envelope being facsimile ed below.
									(Depositor's name)
									(Signature)
									(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		CONFIR	MATION NO.
10/774,473	02/10/2004			Noriyoshi Kurotsu		-	00862.023450.		9148
				IATION PROCESSING A					
APPLN, TYPE	SMALL ENTITY	ISSUE FEE D	UE	PUBLICATION FEE DUE	E PREV. PAID ISSUE				ATE DUE
nonprovisional	onprovisional NO		\$1510 \$300		\$0		\$1810	0	6/30/2009
EXAM	EXAMINER		Γ	CLASS-SUBCLASS					
RODRIGUEZ		2625		358-00I I 60					
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME Al PLEASE NOTE: Uni recordation as set forti	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA ess an assignee is ident h in 37 CFR 3.11. Comp	nge of Correspon Indication form ed. Use of a Cus TO BE PRINTI	dence tomer	2. For printing on the p (1) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent atto listed, no name will be IHE PATENT (print or typ data will appear on the p T a substitute for filing an.	3 registered patent ely, 2 firm (having as a gent) and the name neys or agents. If a printed. e) ttent. If an assigne assignment.	membes of u	er a 2p to p to get is 3	ocument h	as been filed for
(A) NAME OF ASSIC		categories (will i	not be pr	(B) RESIDENCE: (CITY			RY) on or other private gro	oup entity	Government
4a. The following fee(s) a Issue Fee Publication Fee (N Advance Order - #	o small entity discount p	permitted)	41	o. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Depo	Form PTO-2038 authorized to chan	is atta	ched. required fee(s), any de	ficiency, o	
	s SMALL ENTITY state	is. See 37 CFR I.		b. Applicant is no long					
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will not be tes Patent and Tr	accepte ademark	d from anyone other than to Office.	ne applicant; a regis	stered a	attorney or agent; or th	e assignee	or other party in
Authorized Signature					Date				
Typed or printed name				Registration No.					
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	EFR 1.311. The in U.S.C. 122 and : USPTO. Time v rden, should be so O NOT SEND FE	formation 37 CFR will vary ent to the ES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 m idual case. Any co r, U.S. Patent and D'THIS ADDRESS	ne publ ninutes mment Fraden . SENI	lic which is to file (and to complete, including s on the amount of the lark Office, U.S. Dep D TO: Commissioner	by the US g gathering ne you req artment of for Patents.	PTO to process) §, preparing, and uire to complete Commerce, P.O. P.O. Box 1450,

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 03/31/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/774,473	02/10/2004	Noriyoshi Kurotsu	00862.023450.	9148	
5514	590 03/31/2009	EXAMINER			
FITZPATRICK	CELLA HARPER &	RODRIGUEZ, LENNIN R			
30 ROCKEFELL					
NEW YORK, NY	10112	2625			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 885 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 885 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)				
10/774,473	KUROTSU ET AL.				
Examiner	Art Unit				
ENNIN R RODRIGHEZ	2625				

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1. This communication is responsive to amendment filed on 1/6/2009.
- The allowed claim(s) is/are 1-5,7-10,12-16 and 18-21.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a)

 All b)

 Some* c)

 None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date _____
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- 2.
 Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3. Information Disclosure Statements (PTO/SB/08),
- Paper No./Mail Date ____
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. ☐ Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date .
- 7. Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. Other _____.
 /King Y. Poon/

Supervisory Patent Examiner, Art Unit 2625

Art Unit: 2625

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-5, 7-10, 12-16 and 18-21 are allowed.

2. The following is an examiner's statement of reasons for allowance:

A. Claims 1-5 and 7-10 are directed to a computer readable storage medium storing a computer executable print control program, the computer executable print control program executed by an information processing apparatus. Claim 1 identifies the uniquely distinct features of "code for causing said information apparatus to execute a data amount detection step of detecting an amount of data not yet transmitted to said image-forming device in the second spool file:

code for causing said information apparatus to execute a data determination step of determining whether or not the amount of data detected in said data amount detection step is below a predetermined threshold;

code for causing said information apparatus to execute a data transmission step of transmitting to said image-forming device the print data in the second spool file in segments if it is determined in said data determination step that the amount of data is below the threshold, and

code for causing said information apparatus to execute a second data transmission step of transmitting to said image-forming device the print data in the second spool file if it is determined in said data determination step that the amount of data is above the threshold." The closest prior art Nakatsuma '132 and Bain '434

Application/Control Number: 10/774,473

Art Unit: 2625

teaches in Fig. 9 and column 12, lines 1-28, The application program 704 starts a print operation on the client computer 702 (102) by using GDI 705. GDI notifies the Windows spooler 707 and virtual print server print monitor 708 of the print start. Upon reception of the print start notice, the virtual print server print monitor 708 requests a print start to the virtual print server service (server) 712 of the server 703 (101) via the virtual print server service (client) 712. GDI 705 requests the printer driver 706 to convert the print data into a printer language. The printer driver 706 converts the print data into a printer language. The print data (graphics data) converted into the printer language is spooled by the Windows spooler 707. The virtual server print monitor 708 receives the print data spooled by the Windows spooler 707 and passes the print data to the virtual print server service (client) 712. The virtual print server service (client) 712 temporarily stores the received print data in the virtual print spooler 801 as a spooling means, in HD 205 shown in FIG. 2. When all the print data is stored in the virtual print spooler 801 in HD 205, the virtual print server service (client) 712 notifies the virtual print server service (server) 712 of the server 703 (101) of the completion of storing the print data and requests a print operation. The virtual print server service uses the same module both for the client and server which can be used in a discriminating way through setting. As described earlier, this module is not necessarily the same for both the client and server, but different modules may be used which are supplied from different FDs as the storage means, either singularly or in combination with other cited references fails to anticipate or render the above underlined limitations obvious (when used with all the claimed limitations).

Application/Control Number: 10/774,473

Art Unit: 2625

B. Claims 12-16 and 18-21 are directed to a computer readable storage medium storing a computer executable print control program, the computer executable print control program executed by an information processing apparatus. Claim 12 identifies the uniquely distinct features of "a data amount detection step of detecting an amount of data not yet transmitted to said image-forming device in the second spool file;

a data determination step of determining whether or not the amount of data detected in said data amount detection step is below a predetermined threshold;

a data transmission step of transmitting to said image-forming device the print data in the second spool file in segments if it is determined in said data determination step that the amount of data is below the threshold, and

a second data transmission step of transmitting to said image-forming device the print data in the second spool file if it is determined in said data determination step that the amount of data is above the threshold." The closest prior art Nakatsuma '132 and Bain '434 teaches in Fig. 9 and column 12, lines 1-28, The application program 704 starts a print operation on the client computer 702 (102) by using GDI 705. GDI notifies the Windows spooler 707 and virtual print server print monitor 708 of the print start. Upon reception of the print start notice, the virtual print server print monitor 708 requests a print start to the virtual print server service (server) 712 of the server 703 (101) via the virtual print server service (client) 712. GDI 705 requests the printer driver 706 to convert the print data into a printer language. The printer driver 706 converts the print data into a printer language. The print data (graphics data) converted into the printer language is spooled by the Windows spooler 707. The virtual server print monitor

Application/Control Number: 10/774,473

Art Unit: 2625

708 receives the print data spooled by the Windows spooler 707 and passes the print data to the virtual print server service (client) 712. The virtual print server service (client) 712 temporarily stores the received print data in the virtual print spooler 801 as a spooling means, in HD 205 shown in FIG. 2. When all the print data is stored in the virtual print spooler 801 in HD 205, the virtual print server service (client) 712 notifies the virtual print server service (server) 712 of the server 703 (101) of the completion of storing the print data and requests a print operation. The virtual print server service uses the same module both for the client and server which can be used in a discriminating way through setting. As described earlier, this module is not necessarily the same for both the client and server, but different modules may be used which are supplied from different FDs as the storage means, either singularly or in combination with other cited references fails to anticipate or render the above underlined limitations obvious (when used with all the claimed limitations).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LENNIN R. RODRIGUEZ whose telephone number is (571)270-1678. The examiner can normally be reached on Monday - Thursday 7:30am - 6:00pm EST.

Application/Control Number: 10/774,473 Page 6

Art Unit: 2625

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/King Y. Poon/ Supervisory Patent Examiner, Art Unit 2625

/Lennin R Rodriguez/ Examiner, Art Unit 2625